

Want to keep growing profitably? Consider managing your prices strategically

The past few years have been exceptionally good for chemical company earnings. High capacity utilization, combined with rising feedstock prices, created an environment more conducive to price increases than we've seen since 1974.

In fact, according to industry news sources, the top 23 companies enjoyed double-digit growth in earnings for the first three quarters of 2005, until Gulf Coast hurricanes disrupted production. The cumulative results through September 2005 showed earnings up 48.0% and sales up 12.5%. For the full year, earnings increased 28.6% from 2004 to \$11.9 billion, while sales rose 10.5% to \$153.6 billion¹.

With those kinds of numbers, should chemical companies be timid in raising prices? We don't think so. Should they be subtle and careful about where, how and how much they raise prices? Absolutely, for the simple reason that, over time, across-the-board price increases can result in lower sales volume and loss of market share. Some of the time, those changes become permanent as customers learn to use (and sometimes prefer) alternative materials. Also, since early 2004, the chemical industry has largely been a seller's market; when supply is tight, pricing power belongs to the producer. But today's customers tend to remember when buyers were calling the shots.

Some chemical companies are starting to ask, "When the market turns – next year or the year after – are we exposed? Are we at risk of losing customers?" In a buyer's market, unilateral pricing can lead to price competition, a powerful threat in an industry whose products tend toward the "commodity" end of the curve. Others have already found that some of their pricing actions have prompted share shifts to competitors or to other not-in-kind products or functional equivalents.

Pricing must be a dynamic and multi-dimensional process.

Of course, above and beyond market-driven pressures are purely commercial reasons for taking a more strategic look at pricing. Even profitable companies have unprofitable customers. Or some charge less-than-optimal prices for products whose value varies with demand, customer perceptions, and product use. Others may charge more-than-

optimal prices and lose revenue and share as a result. Simply put, not all customers are the same; they differ in what they want, when they want it, why they want it, and how they want it. And they differ in how they assess the value of products and services.

Why aren't these distinctions acknowledged more often in pricing?

First, there's the pressure to show short-term, top-line growth – pressure from analysts, shareholders, vendors, employees, and even the community at large. The "quick fix" is the across-the-board price increase. But consider this plausible scenario:

Two customers pay the same price for the same product. Over the course of a quarter, they buy the same amount. Customer A accepts the product in a single delivery; customer B requires the chemical company to hold the inventory and deliver the product in small batches once a week, making it an unprofitable relationship for the chemical company. The chemical company decides on a five percent across-the-board price increase. Customer A – the profitable one – is alienated and begins looking for an alternative supplier. Customer B is fine with the increase, but remains unprofitable.

Second, especially for commodity chemical companies, there's the importance of production volume in realizing acceptable asset utilization. But can a lower volume ever be the "right" answer? Yes, we think so, because price optimization comes from balancing volume and price to help achieve the highest sustainable profit. A lower volume – for some products, with some customers – can sometimes be the most appropriate for the business overall.

Specifically, for some products, demand is elastic, even within modest price bands: the higher the price, the less will be purchased. For others, demand is inelastic: a price increase will not significantly affect consumption and will, in fact, generate more revenue for the chemical producer. Sometimes, the issue isn't just overall consumption, but the potential for share shifts. Customer A considers the value they receive from an offering to be equal to the value they pay. Customer B, on the other hand, has different expectations and judges possible suppliers differently; Customer B could assign "more than equal" value to an offering relative to its price and,

importantly, relative to a competitor's offering. If prices are raised across the board, Customer A might be charged too much relative to the value they perceive (and be driven away) and Customer B might still be charged too little. Consequently, volume and capacity utilization would suffer, while revenue would still not be optimized.

Third, establishing effective pricing can be difficult – that is, achieving price optimization can be difficult because it requires time, effort, and relatively sophisticated analytics. It starts with a deep understanding of customer values: “Who is buying? What are they buying and why? What are their alternatives? How much are they paying? Why are they buying at that price? How might share shift in my favor, or against us?”

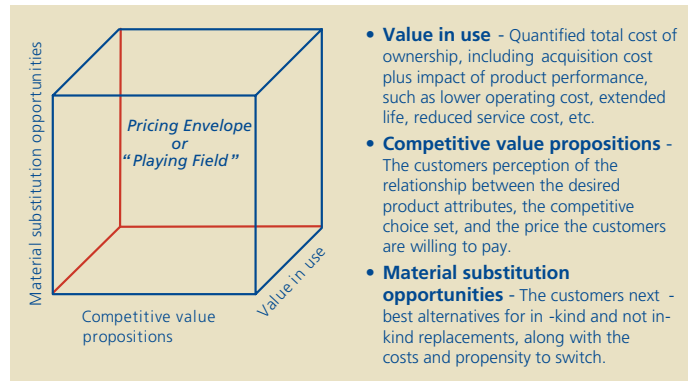
The hard work in answering those questions might be the main reason why fewer than three percent of companies do an effective job of strategically setting prices and then in managing and enforcing them², even though more effective pricing improves return on sales an average five percent or \$1.5 billion of additional value over five years for an average S&P 500 company³.

How far can you drive your prices?

Does a company exist that does not have competition? Is any product beyond substitution? In the most extreme case, one can “just do without”; so, limits to pricing will always be an issue. So, how might a chemical company determine those limits?

At Deloitte Consulting LLP (Deloitte Consulting), we consider three dimensions to define how far one can go with price increases before inflicting damage to the business: 1) value in use, 2) competitive value propositions and 3) material substitution opportunities.

For a Customer or Market Segment

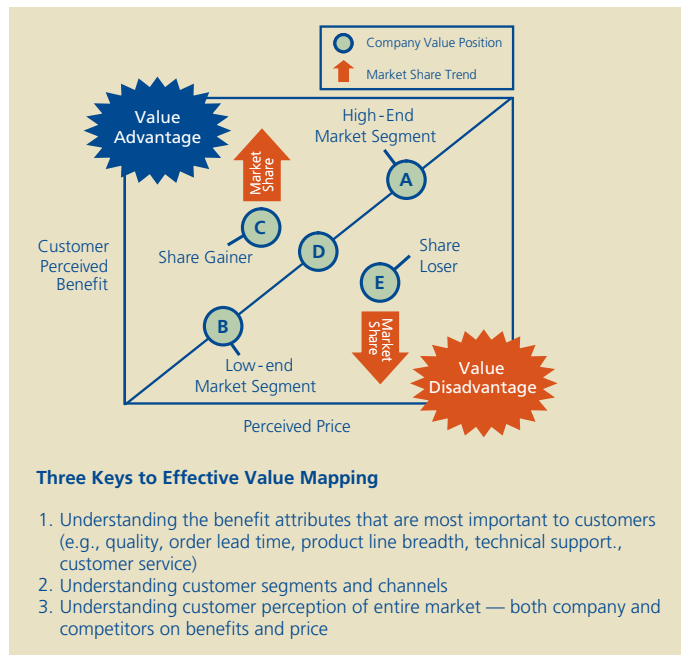


Value in use: This is the maximum price that a user is willing to pay for a product under any circumstance at a given point in time. Over time, this maximum price can change for many reasons, including a shift in the value of other customer inputs, costs, or downstream products. For example, a processing aid that helps an extrusion line to run 15% faster may have great value when demand is high and capacity short, but may be worth significantly less to a buyer when it is sitting on excess capacity. So even if your value delivery is judged to be better than the competition at a similar price, if both of your prices are higher than this value, volume consumption will likely suffer.

Competitive value propositions: Competing in value (actual or perceived) begins with customer segmentation because that groups customers who share similar characteristics or behaviors and are, therefore, likely to respond similarly to a product offering, including price. How do you segment customers?

First, define customers by need, behaviors and/or outcome. What is important to these customers⁴? What are they willing to pay for? How do they view one supplier's strengths (or its product's strengths) compared to another's? How do they view your competition's offerings? How do they perceive the value you (and your competitors) provide versus the value they perceive you extract from them? At the end of this step, it's possible to draw a value perception map, as illustrated here.

Market Shares Shift Based on Value Position



With a value map, a chemical company can see where it stands relative to competitors in offering the right amount of value (or perceived value) relative to the price customers are willing to pay. If competitors are offering more value at a lower price, a company will be at a competitive disadvantage.

Then, create a tailored “value proposition” for each segment. When a company is strong in the value it delivers (whether actual or perceived), it can stand firm on pricing. When it's weak, the company must either improve its value or be less aggressive in its pricing (assuming a buyer's market). In some cases, the most appropriate decision may be to not serve certain segments or to serve them with only select products. The value proposition (product + service + price) should fit the customer's requirements and assessment schema in a way that will be perceived to be superior to competitor's offerings, while fitting with the supplier's ability and cost to deliver that package of goods and services.

Material substitution opportunities: Every company – every product – has competition (this is especially true in the world of chemical and plastics). If caustic prices get too high compared to those for soda ash, some customers (for some applications) will switch. If one engineering resin gets too expensive, another an alloy or a natural material may take its place. In the last two years, as feedstock price have risen rapidly, some products have priced themselves out of their applications and suffered volume erosion. Others suffered the same fate as not-in-kind competitors introduced alternative materials with comparable performance or properties.

For most specialty and performance chemicals, as well as for most resins and other materials, functional equivalents do exist and must be explicitly

considered in the development of pricing strategy. Since, by definition, these materials are different, their costs and prices may well move differently over time, so it is not enough to perform this analysis once and then assume the results are valid forever.

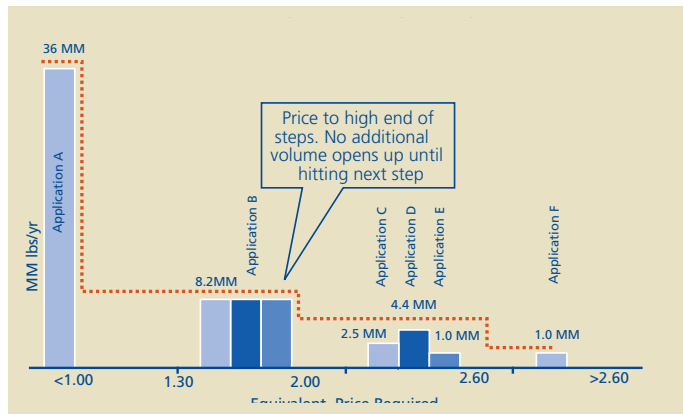
This caveat might be most important when positioning a new product for launch. As the exhibit below shows, the volume for the proposed new product is highly sensitive to its price (that is, certain large applications are out of the question at higher price levels). As is typical for many materials and intermediates, the “elasticity curve” is lumpy and only approximate – more a step function than a curve. This has significant implications for strategic pricing: The product should be priced toward the high end of each step, since no additional volume applications open up until the next lower price step.

What is value? That’s in the eyes of the beholder, as they say.

According to a recent benchmarking study, this knowledge of what a customer values is one of the distinguishing characteristics of high performance companies:

High performance companies make important distinctions between the requirements of various market segments, allowing them to focus on customer issues that can result in additional sales ... [They’re] particularly adept at defining market segments, identifying market drivers, [and] defining their competitive positions ... Nearly 70% have well documented plans to increase business with [their most valuable customers].⁵

Industrial Elasticity Curves Typically Are Not Smooth



The value a customer gives a product can reflect *need, use, or other preferences*.⁶

To price by need, the producer must discover what a customer (or customer segment) considers important (such as pre- and post-sale support or a product’s specific performance); create an offering that addresses the need; and then price the product according to the customer’s value assessment metrics. The greater the need, the more the customer is generally willing to pay.

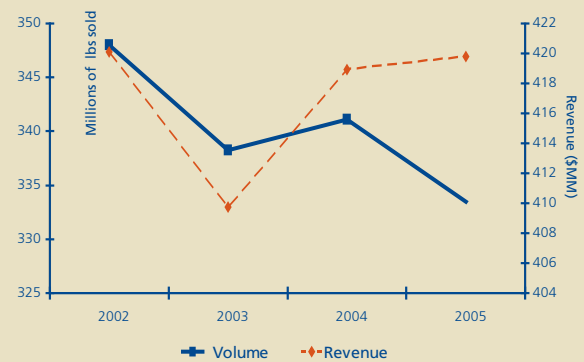
To price by use or application, the producer begins with an understanding of the customer’s desired outcomes. The more urgent or sensitive the outcome, the more the customer should be willing to pay. For example, when a product is used in a hazardous environment it can command a higher price than when it is used in a non-hazardous environment. In practice, this simple concept is often complicated by issues of price transparency and market channels that may make such price discrimination

Keep an eye on competitors

Deloitte Consulting recently worked with a company that was effectively raising its prices and enforcing its pricing discipline within the organization. But, volume was not growing; In fact, volume was actually shrinking 1.5% per year in a market that was growing 3% per year. Why?

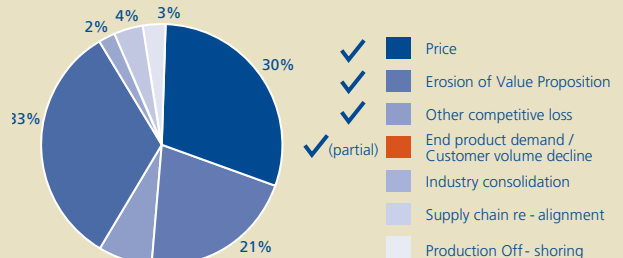
A “blind” survey of customers and former customers showed that most of the volume erosion was within the company’s control; specifically, because management was not keeping track of the value being offered by competitors, both in-kind (direct) and not in-kind (material substitution). Once the company understood the cause of the erosion, it repositioned certain segments to realign value and price.

Volume and Revenue (2000 - 2005)



- Volume experienced a 1.5% CAGR in the period 2002-2005 in a market that grew 3% per year
- Revenue was essentially flat (0.08% CAGR) over the same period

Volume Erosion - Root Causes (2003 - 2005)



difficult. In those cases, a good solution might “tier” product performance to minimize spillover effects; classic examples include certifications or quality/purity levels.

Pricing should differ by customer segment, or even by customers within a segment. (Note: just because two customers are in the same industry – say, automotive or pharmaceutical – they don’t necessarily share the same values. Moreover, two customers from two different industries might have a lot more in common than two from the same.)

Without value pricing, the risk is high that a chemical company will over-serve or under-serve a customer. For either mistake, the penalty is the same: loss of margin.

What else can you do to improve revenue and margin without killing growth?

With all the facts, you can drive growth with profitable customers. By shifting the center of gravity of your business – to higher margin, more attractive customers, segments, and product offerings – you can boost both the top and bottom lines, without the need for expansion capital or risking business erosion. In commodity segments (where there’s not much market value beyond price and very little perceived differences among competitors), you can “cherry pick” customers and not waste time and resources trying to win low-margin business.

Pricing implies value; execution makes all the difference.

Of course, the task of optimizing prices is continuous. All kinds of pressures – from shifts in an individual customer’s strategy to trends in the global marketplace or environmental – require the nearly constant refinement of the pricing strategy. More under your control is performance; the implied value must be delivered, or the customer will force a price concession.

Everyone in the organization – but especially sales – has to understand and adhere to the value pricing strategy. A few questions come to mind: How do you prepare and support the sales force to execute? How do you guard against blurring the distinction between segment offerings, potentially confusing both the marketplace and your own organization? How do you align the rest of the organization around a philosophy of value instead of a philosophy of volume? Accomplishing this may not be easy, but its rewards are both significant and lasting.

As one chemical industry leader commented after having made this journey: “This isn’t just a quick fix with benefits that fade. It’s a way to fundamentally change the way your people think and the way your company does business to be more profitable.”⁷

Authors:

Alice Wachol
Principal
Deloitte Consulting LLP
awachol@deloitte.com
313-919-3105

Bob Olsen
Senior Manager
Deloitte Consulting LLP
rolsen@deloitte.com
215-850-7177

Jim Manocchi
Director
Deloitte Consulting LLP
jmanocchi@deloitte.com
603-674-4162

Endnotes

¹ William J. Storck, “Chemical Earnings In Fourth Quarter: Results were hard hit by effects of hurricanes; DuPont was a big factor in poor growth.” *Chemical and Engineering News*, February 27, 2006 (Volume 84, Number 9, pp. 23-26) at <http://pubs.acs.org>.

Note: The 23 companies included in C&EN’s earnings analysis are U.S. basic chemical companies, each of which has more than \$1 billion in annual chemical sales.

² Laura Preslan, “Price Management: Conventional Wisdom is Wrong.” *AMR Research Outlook*, February 2, 2004.

³ Kiewell and Roegner, “The CFO Guide to Better Pricing.” *McKinsey on Finance*, Autumn 2002. [we need first names of authors]

⁴ The answers can come from many different types of research, including customer interviews, surveys, or focus groups or conjoint analyses that test various product/service combinations and runs the data through an analysis tool to quantify customer preferences.

⁵ Catalyst Connection, “Customer-driven Strategy in Regional Manufacturing Companies: A Performance Benchmarking Survey,” 2005.

In the study, a company was considered “high performance” if it met three quantitative criteria (a significant increase in sales; an increase or significant increase in gross margin; and revenue from new products of 10% or more) and at least three of five qualitative criteria (anticipated company growth equal to or greater than expected market growth; technology and innovation as key market drivers; highly differentiated products and services; self definition as “industry leader”; and/or an improved ability to implement strategy.

⁶ Remember, value does not necessarily mean “performance”; in fact, value can be expressed as ratings, rankings, absolute performance, or as actual financial impact.

⁷ Michael R. Reopel, Robert G. Docters, Jeanne-Mey Sun, Stephen M. Tanny, “Winning the Profit Game.” McGraw-Hill, 2004.

Disclaimer

The information contained herein is provided by Deloitte Consulting LLP and is intended to provide general information on a particular subject or subjects and is not an exhaustive treatment of such subject(s). Accordingly, the information is not intended to constitute accounting, tax, legal, investment, consulting or other professional advice or services. The information is not intended to be relied upon as the sole basis for any decision which may affect you or your business. Before making any decision or taking any action that might affect your personal finances or business, you should consult a qualified professional adviser. The information contained herein is provided as is, and Deloitte Consulting LLP makes no express or implied representations or warranties regarding the information contained herein. Without limiting the foregoing, Deloitte Consulting LLP does not warrant that the information contained herein will be error-free or will meet any particular criteria of performance or quality. Deloitte Consulting LLP expressly disclaims all implied warranties, including, without limitation, warranties of merchantability, title, fitness for a particular purpose, noninfringement, compatibility, security, and accuracy. Your use of the information contained herein is at your own risk and you assume full responsibility and risk of loss resulting from the use thereof. Deloitte Consulting LLP will not be liable for any special, indirect, incidental, consequential, or punitive damages or any other damages whatsoever, whether in an action of contract, statute of te foregoing is not fully enforceable for any reason, the remainder shall nonetheless continue to apply.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu, a Swiss Verein, its member firms and their respective subsidiaries and affiliates. As a Swiss Verein (association), neither Deloitte Touche Tohmatsu nor any of its member firms has any liability for each other’s acts or omissions. Each of the member firms is a separate and independent legal entity operating under the names “Deloitte”, “Deloitte & Touche”, “Deloitte Touche Tohmatsu” or other related names. Services are provided by the member firms or their subsidiaries or affiliates and not by the Deloitte Touche Tohmatsu Verein.

Deloitte & Touche USA LLP is the U.S. member firm of Deloitte Touche Tohmatsu. In the United States, services are provided by the subsidiaries of Deloitte & Touche USA LLP (Deloitte & Touche LLP, Deloitte Consulting LLP, Deloitte Financial Advisory Services LLP, Deloitte Tax LLP, and their subsidiaries), and not by Deloitte & Touche USA LLP.

Copyright © 2006 Deloitte Development LLC. All rights reserved.